

Date: Thursday, 12/14/2006 3:39:40 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services
 Job Number : 29965
 Estimate Number : 10389
 P.O. Number : *N/A*
 This Issue : 12/14/2006 S.O. No. : *N/A*
 Prsht Rev. : NC
 First Issue : *N/A* Type : MACHINED PARTS
 Previous Run : 29121
 Written By : *[Signature]*
 Checked & Approved By : *[Signature]* 061215
 Comment : Est Rev: A New Issue 05-11-08 JLM

Drawing Name : BAR

Part Number : D31964

Drawing Number : D3196 UNDER REVIEW

Project Number : N/A

Drawing Revision : *U/C* 06.12.15

Material :

Due Date : 1/5/2007

Qty: 10 Um: Each

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

M6061T6B0750X01500

6061-T6 Bar .75" X 1.5"



Comment: Qty.: 3.0345 f(s)/Unit Total : 30.3450 f(s)

Material: 6061-T6/T651 (QQ-A-200/8) or (QQ-A-225/8)

(M6061T6B0.750x01.500)

Identify for D3196-4

Batch: *M102508x08'**/ M102447x08'**J.F 06/12/29*

⑨

2.0

BAND SAW

BAND SAW



Comment: BAND SAW

Cut blank: (0.75" x 1.50") x 34.750" long Bar

J.F 06/12/29

⑨

3.0

HAAS1

HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3196-4 as per Folio FA339 and Dwg D3196 Identify as D3196-4

2-Deburr

En 07/10/02

⑧

4.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

En 07/10/02

⑧

5.0

QC8

SECOND CHECK





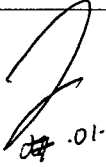

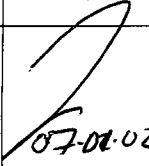
Comment: SECOND CHECK

En 07/10/02

⑧

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3196-4 PAR #: N/A Fault Category: CNC NCR: Yes No DQA: HA Date: 07.01.05
 QA: N/C Closed: HA Date: 07.01.05

NCR: <u>29965</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/01/02	# 3.0	one (1) part scrap. Placed He wrong direction when machin. operator ERRO	 05/01/02	Scrap and destroy. no mgt. to replace	 07/01/02	 07.01.02	 05/01/02	 07-01-02

NOTE: Date & initial all entries



Date: Thursday, 12/14/2006 3:39:41 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BAR

Job Number: 29965

Part Number: D31964

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

am

07/01/03

(8)

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

Ed/am

07/01/04

(8)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

pu 7/01/04

(8)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 5H34

07/01/04
07/01/04 (8)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07-01-05

Job Completion



u 07-01-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	29965
Description: Bar		Part Number:	D3196-4
Inspection Dwg: D3196	Rev: <u>B</u> <u>C</u> <u>06.12.15</u>	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
34.625	+/-0.010	34.625	—		Tape measure	
33.650	+/-0.010	33.650	—		" "	
16.639	+/-0.010	16.639	—		" "	
0.488	+/-0.010	0.482	—		Vern	
0.962	+/-0.005	0.962	—		Vern	
0.464	+/-0.010	0.468	—		"	
0.504	+/-0.010	0.509	—		"	
Ø0.344	+0.006/-0.001	0.348	—		"	
Ø0.660 x 100°	+0.008/-0.001 x 0.5°	0.660 x 100°	—		"	
0.512	+/-0.005	0.507	—		Vern	
0.060 x 45°	+/-0.010 x 0.5°	0.060 x 45°	—		"	
4.750	+/-0.010	4.752	—		Vern	
12.531	+/-0.010	12.531	—		Tape measure	
16.627	+/-0.010	16.627	—		" "	
21.844	+/-0.010	21.844	—		" "	
29.625	+/-0.010	29.625	—		Tape measure	
0.250	+/-0.010	0.248	—		Vern	
1.000	+/-0.010	0.997	—		Vern	
R0.125	+/-0.010	0.125	—		R.G.	
0.987	+/-0.010	0.988	—		Vern	

Measured by: <u>En</u>	Audited by: <u>md</u>	Prototype Approval:	N/A
Date: <u>06/12/29</u>	Date: <u>06/12/29</u>	Date:	N/A

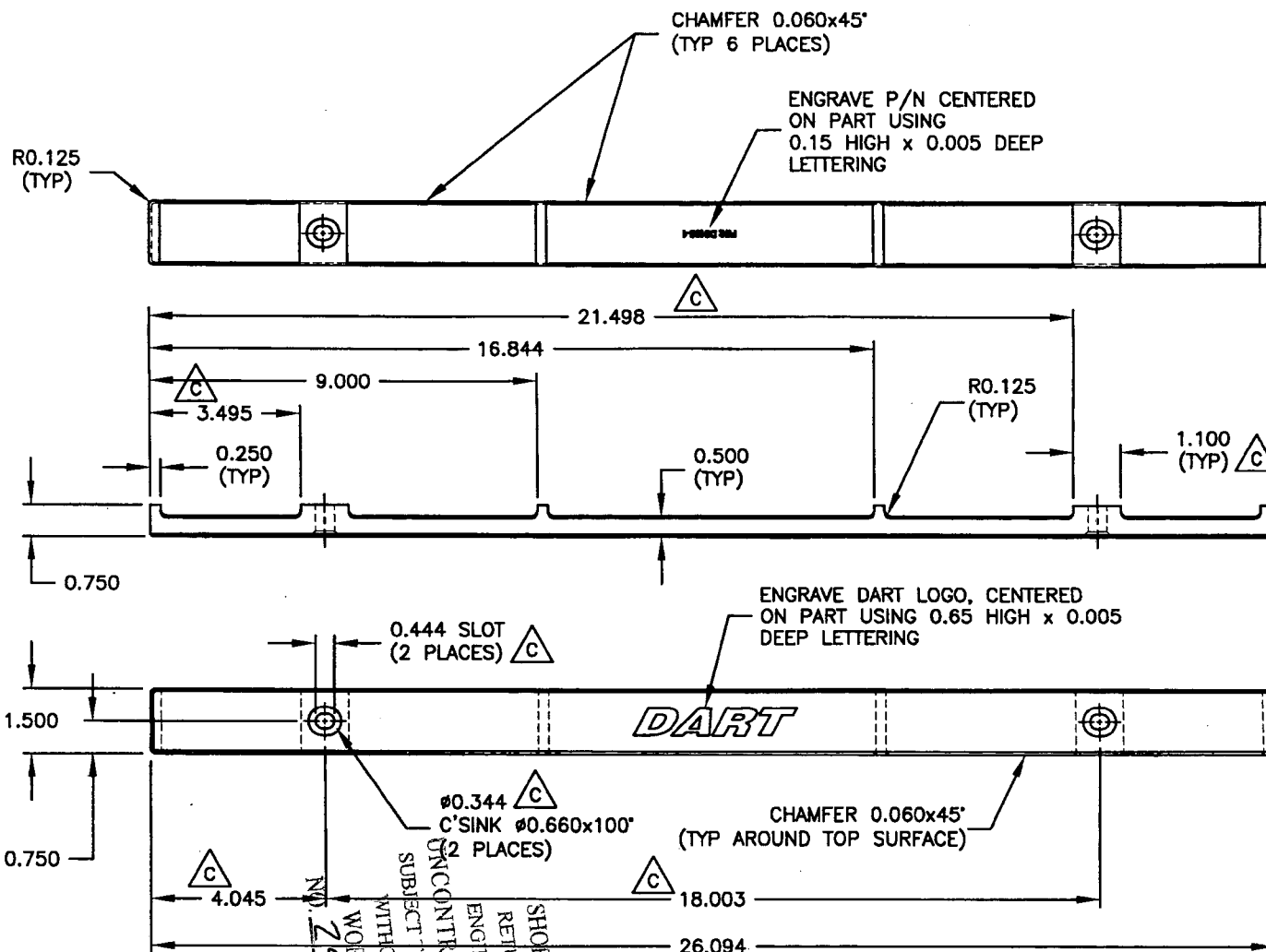
Rev	Date	Change	Revised by	Approved
A	04.04.20	New Issue	KJ/RF	
B	06.10.24	Dwg Rev. updated	KJ/JLM <u>24</u>	<u>BE</u>

DART

RELEASED

06.10.31

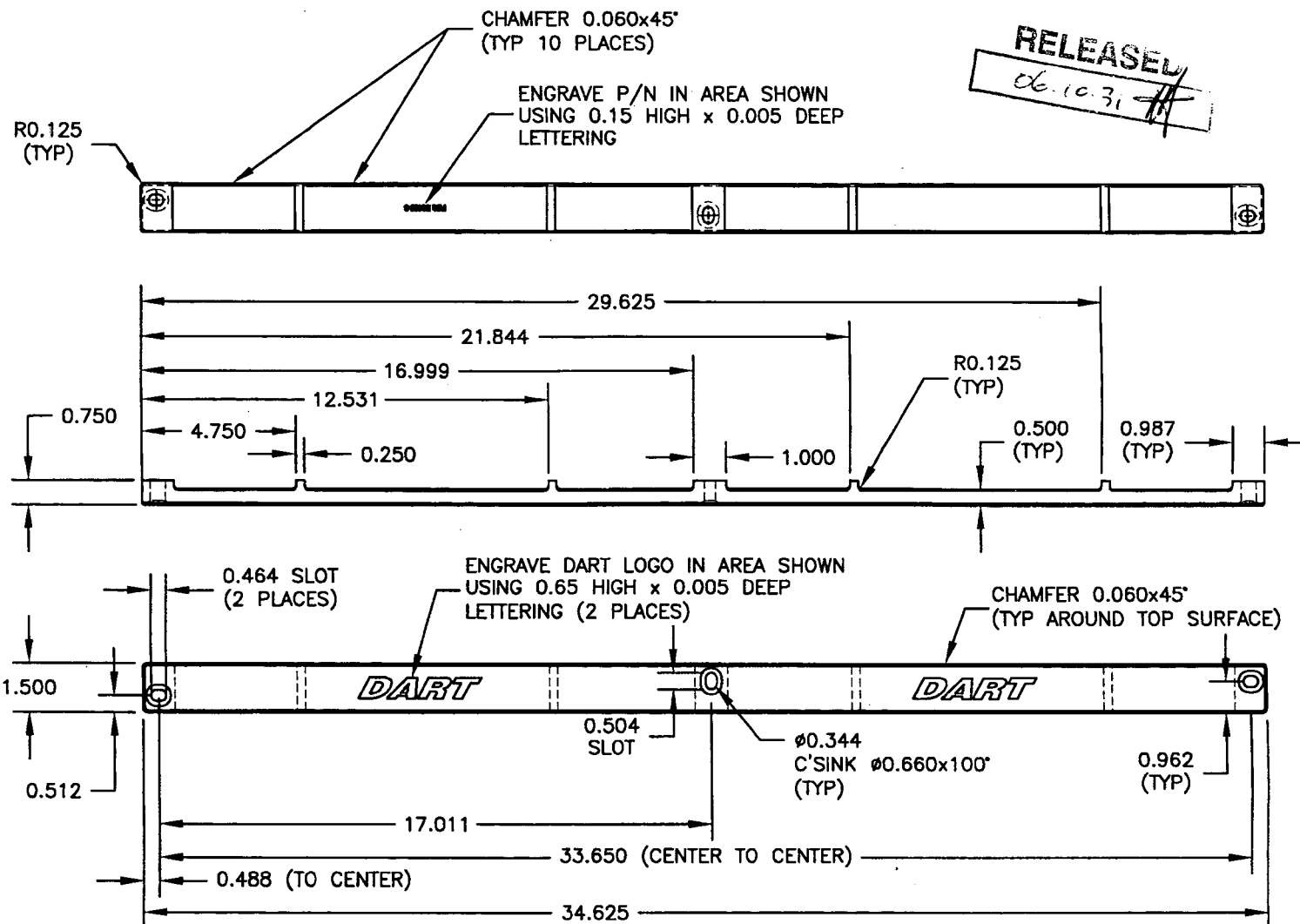
DESIGN	DRAWN BY	DART AEROSPACE LTD	REV. C
00	JS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	SHEET 1 OF 3
PH	JS	D3196	
DATE		TITLE	SCALE
06.10.31		BAR	1:4
A	03.06.25	NEW ISSUE	
B	06.09.25	ADD D3196-5	
C	06.10.31	ADD SLOTS ON -1; REMOVED -5	

**D3196-1 BAR**

- 1) MATERIAL: 6061-T6/T651 ALUMINUM (QQ-A-200/8 OR QQ-A-225/8) (REF DART SPEC. M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA	
CHECKED PH	APPROVED [Signature]	DRAWING NO. D3196	REV. C
DATE 06.10.31	TITLE BAR	SHEET 2 OF 3	SCALE 1:5

**D3196-3 BAR**

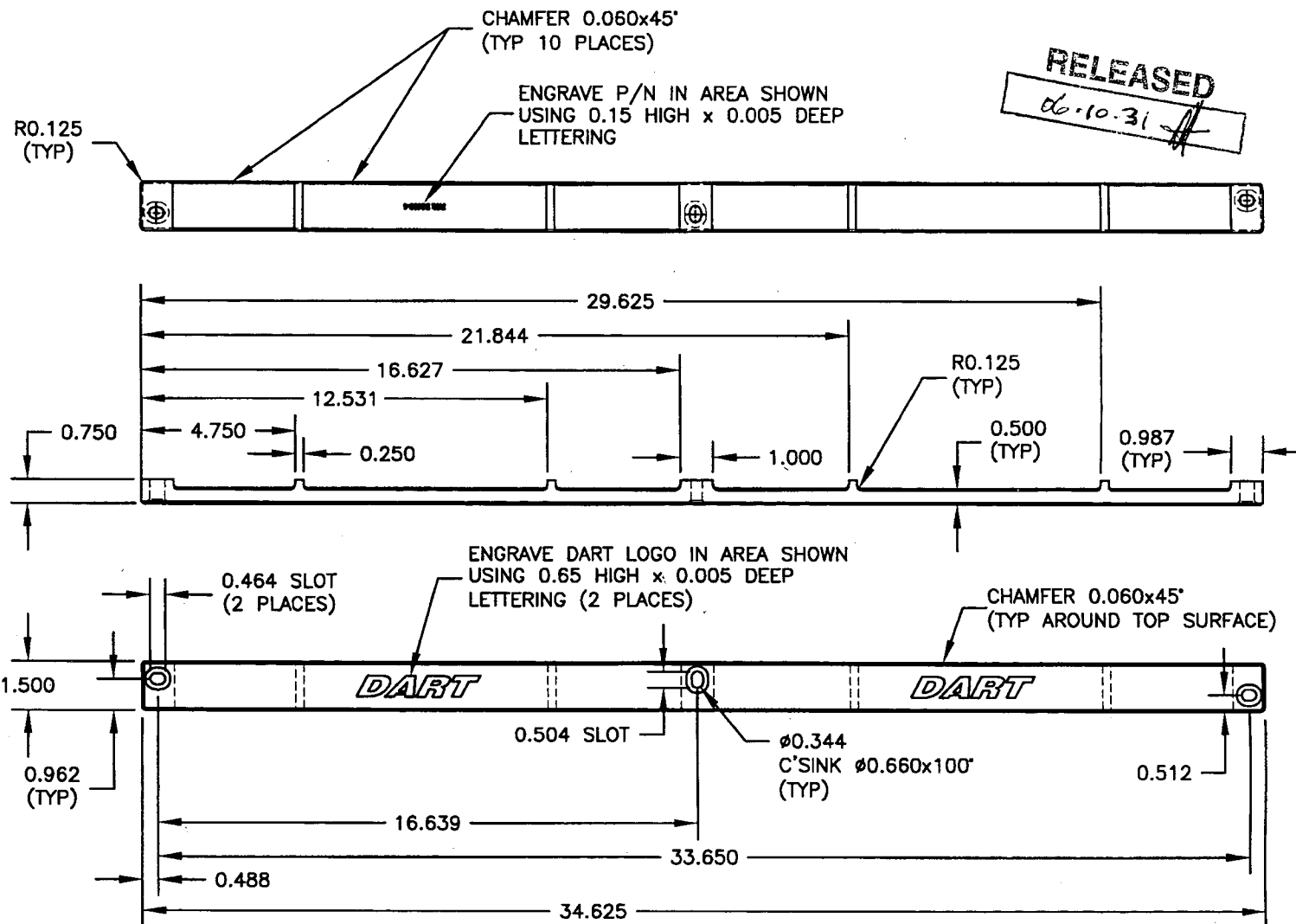
- 1) MATERIAL: 6061-T6/T651 ALUMINUM (QQ-A-200/8 OR QQ-A-225/8)
(REF DART SPEC. M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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WITHOUT NOTICE
WORK ORDER
NO. 29965

DART

DESIGN	90	DRAWN BY	JS	DART AEROSPACE LTD
CHECKED	PH	APPROVED	JS	HAWKESBURY, ONTARIO, CANADA
DATE	06.10.31	DRAWING NO.	D3196	REV. C
		TITLE	BAR	SHEET 3 OF 3
		SCALE	1:5	

RELEASED
06-10-31



D3196-4 BAR

- 1) MATERIAL: 6061-T6/T651 ALUMINUM (QQ-A-200/8 OR QQ-A-225/8) (REF DART SPEC. M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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